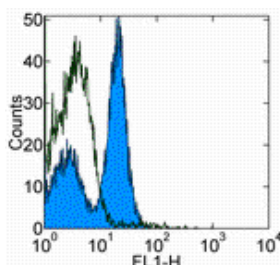


Anti-Mouse/Rat CD40 Purified

Catalog Number: 14-0402

Also Known As: TNFRSF5

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of BALB/c splenocytes with 0.5 ug Armenian Hamster IgG Isotype Control Purified (cat. 14-4888) (open histogram) or 0.5 ug Anti-Mouse/Rat CD40 Purified (filled histogram) followed by Anti-Armenian Hamster IgG FITC (cat. 11-4111). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse/Rat CD40 Purified

REF **Catalog Number:** 14-0402

Clone: HM40-3

Concentration: 0.5 mg/mL

Host/Isotype: Armenian Hamster IgM, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

Description

The HM40-3 monoclonal antibody reacts with mouse and rat CD40, a 45-50 kDa type I transmembrane glycoprotein. CD40 is a member of the TNFR family and is expressed by mouse B lymphocytes, follicular dendritic cells, thymic epithelium, and a subset of peripheral T cells. CD40 regulates B cell development/maturation by inducing Ig isotype switching and in combination with other signals such as IL-4, protects B cells from surface Ig-induced apoptosis and promotes proliferation. Interaction of CD40 with CD154 (gp39), its ligand on T cells, is important in T-B cell crosstalk and plays a role in costimulation and immune regulation.

Applications Reported

The HM40-3 antibody has been reported for use in flow cytometric analysis, and immunohistochemical staining. HM40-3 has also been reported in inhibition of binding of soluble CD154 to CD40 and *in vitro* activation of B cells. (Please use Functional Grade purified HM40-3, cat. 16-0402, in functional assays.)

Applications Tested

The HM40-3 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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Kawano, T., J. Cui, et al. 1997. CD1d-restricted and TCR-mediated activation of Va14 NKT cells by glycosylceramides. *Science* 278: 1626-9

Ferlin, W. G., E. Severinson, et al. 1996. CD40 signaling induces interleukin-4-independent IgE switching in vivo. *Eur J Immunol* 26(12): 2911-5.

Kashiwada, M., Y. Yagita, et al. 1996. Activation of mitogen-activated protein kinases via CD40 is distinct from that stimulated by surface IgM on B cells. *Eur. J. Immunol.* 26: 1451-58

Inaba, K., M. Witmer-Pack, et al. 1994. The tissue distribution of the B7-2 costimulator in mice: abundant expression on dendritic cells in situ and during maturation in vitro. *J. Exp. Med.* 180:1849-60.

Related Products

11-4111 Anti-Armenian Hamster IgG FITC
14-4888 Armenian Hamster IgG Isotype Control Purified (eBio299Arm)

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Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com